IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended): A method of assembling a disc in a disc apparatus, comprising:

mounting a disc onto a hub of a spindle motor in a disc apparatus in a state capable of being moved with respect to the hub of the spindle motor in a direction of a disc radius;

providing first and second flat members arranged in parallel at opposite sides of the disc mounted on the hub, in a symmetrical manner with respect to a center axis of the hub, the first and second flat members each having a flat surface facing an outer circumferential edge of the disc;

pressing the first flat member having a flat surface toward an outer circumferential edge of the disc in a first direction of a center axis of the hub, ~~by a first flat member having a flat surface~~ so as to bring an inner circumferential edge of the disc into contact with an outer circumferential surface of the hub;

pressing ~~back~~the second flat member having a flat surface toward the outer circumferential edge of the disc in contact with the first flat member and the outer circumferential edge of the disc ~~at an opposite position to the center of the disc~~ in ~~an inverse~~second direction ~~to a pressing direction of the first flat member~~opposite to said first direction, to a half of an amount of tolerance between the inner circumferential edge of the disc and the outer circumferential surface of the hub, ~~by a second flat member having a flat surface arranged in parallel to the first flat member~~

~~and in an opposite side to the center axis of the hub~~so as to center the disc with respect to the center axis of the hub in both vertical and horizontal directions; and

fixing the disc to the hub of the spindle motor by a clamp member.

Claim 2 (Currently Amended): A method of assembling a disc in a disc apparatus, comprising:

mounting a disc onto a hub of a spindle motor in a disc apparatus in a state capable of being moved with respect to the hub of the spindle motor in a direction of a disc radius;

providing first and second flat members arranged in parallel at opposite sides of the disc mounted on the hub, in a symmetrical manner with respect to a center axis of the hub, the first and second flat members each having a flat surface facing an outer circumferential edge of the disc;

pressing an outer circumferential edge of the disc in a direction of a center axis of the hub by a~~the~~ first flat member having a flat surface, so as to bring an inner circumferential edge of the disc into contact with an outer circumferential surface of the hub;

pressing back the outer circumferential edge of the disc in contact with the first flat member and the outer circumferential edge of the disc at an opposite position to the center of the disc in an inverse direction to a pressing direction of the first flat member by the~~a~~ second flat member having a flat surface, ~~arranged in parallel to the first flat member in an opposite side to the center axis of the hub~~ until the outer circumferential surface of the hub and the inner circumferential edge of the

disc are in contact with each other, and measuring a difference between the outer circumferential surface of the hub and the inner circumferential edge of the disc;

pressing back a half of the difference between the outer circumferential surface of the hub and the inner circumferential edge of the disc by the first flat member, so as to center the disc with respect to the center axis of the hub in both vertical and horizontal directions; and

fixing the disc to the hub of the spindle motor by a clamp member.

Claim 3 (Previously Presented): A method as claimed in claim 1, wherein pressurizing means for pressing the outer circumferential edge of the disc toward the center axis of the hub is provided in a portion to which the first flat member having the flat surface is mounted to press the outer circumferential edge of the disc in the direction of the center axis of the hub.

Claim 4 (Previously Presented): A method as claimed in claim 2, wherein pressurizing means for pressing the outer circumferential edge of the disc toward the center axis of the hub is provided in a portion to which the first flat member having the flat surface is mounted to press the outer circumferential edge of the disc in the direction of the center axis of the hub.

Claim 5 (Currently Amended): A method of assembling a disc in a disc apparatus comprising:

fixing a disc apparatus base on which a spindle motor is mounted;

mounting a disc onto a hub of a spindle motor in a disc apparatus in a state capable of being moved with respect to the hub of the spindle motor in a direction of a disc radius;

providing first and second flat members arranged in parallel at opposite sides of the disc mounted on the hub, in a symmetrical manner with respect to a center axis of the hub, the first and second flat members each having a flat surface facing an outer circumferential edge of the disc;

pressing an outer circumferential edge of the disc in a direction of a center axis of the hub by athe first flat member having a flat surface, so as to bring an inner circumferential edge of the disc into contact with an outer circumferential surface of the hub;

pressing back the outer circumferential edge of the disc in contact with the first flat member and the outer circumferential edge of the disc at an opposite position to the center of the disc in an inverse direction to a pressing direction of the first flat member to a half of an amount of tolerance between the inner circumferential edge of the disc and the outer circumferential surface of the hub, by athe second flat member having a flat surface, ~~arranged in parallel to the first flat member and in an opposite side to the center axis of the hub~~so as to center the disc with respect to the center axis of the hub in both vertical and horizontal directions; and

fixing the disc to the hub by a clamp member.

Claim 6 (Currently Amended): A method of assembling a disc in a disc apparatus comprising:

fixing a disc apparatus base on which a spindle motor is mounted;

mounting a disc onto a hub of a spindle motor in a disc apparatus in a state capable of being moved with respect to the hub of the spindle motor in a direction of a disc radius;

providing first and second flat members arranged in parallel at opposite sides of the disc mounted on the hub, in a symmetrical manner with respect to a center axis of the hub, the first and second flat members each having a flat surface facing an outer circumferential edge of the disc;

pressing an outer circumferential edge of the disc in a direction of a center axis of the hub by athe first flat member having a flat surface, so as to bring an inner circumferential edge of the disc into contact with an outer circumferential surface of the hub;

pressing back the outer circumferential edge of the disc in contact with the first flat member and the outer circumferential edge of the disc at an opposite position to the center of the disc in an inverse direction to a pressing direction of the first flat member by athe second flat member having a flat surface, ~~arranged in parallel to the first flat member in an opposite side to the center axis of the hub~~ until the outer circumferential surface of the hub and the inner circumferential edge of the disc are in contact with each other, and measuring a difference between the outer circumferential surface of the hub and the inner circumferential edge of the disc corresponding to an amount of pressing back;

pressing back a half of the difference between the outer circumferential surface of the hub and the inner circumferential edge of the disc by the first flat

member, so as to center the disc with respect to the center axis of the hub in both vertical and horizontal directions; and

fixing the disc to the hub of the spindle motor by a clamp member.

Claim 7 (Previously Presented): A method as claim in claim 3, wherein said pressurizing means includes a spring arranged to press the first flat member having the flat surface against the outer circumferential edge of the disc toward the center axis of the hub.

Claim 8 (Previously Presented): A method as claim in claim 4, wherein said pressurizing means includes a spring arranged to press the first flat member having the flat surface against the outer circumferential edge of the disc toward the center axis of the hub.

Claim 9 (Previously Presented): A method as claim in claim 3, wherein a displacement gauge is provided to monitor the movement of the first flat member as the first flat member having the flat surface is pressed against the outer circumferential edge of the disc toward the center axis of the hub.

Claim 10 (Previously Presented): A method as claim in claim 4, wherein a displacement gauge is provided to monitor the movement of the first flat member as the first flat member having the flat surface is pressed against the outer circumferential edge of the disc toward the center axis of the hub.

Claims 11-13 (Canceled):

Claim 14 (Currently Amended): A method for controlling a disc apparatus comprising a base on which a spindle motor hub is mounted, and a disc mounted onto the hub, said method comprising:

providing first and second flat members with flat surfaces arranged in parallel ~~in~~at opposite sides of a disc relative to a center axis of the hub, to center the disc relative to a center axis of the hub after the disc is mounted onto the hub; and

controlling movement of the first and second flat members to center the disc relative to a~~the~~ center axis of the hub by:

pressing the first flat member having a flat surface on one side of the disc against an outer circumferential edge of the disc in a first direction relative to the center axis of the hub, until an inner circumferential edge of the disc is in contact with an outer circumferential surface of the hub;

pressing the second flat member having a flat surface on the other side of the disc against the outer circumferential edge of the disc in a second direction opposite to said first direction relative to the center axis of the hub, until the inner circumferential edge of the disc is in contact with the outer circumferential surface of the hub;

measuring a distance difference between the inner circumferential edge of the disc and the outer circumferential surface of the hub; and

pressing the first flat member having the flat surface against the outer circumferential edge of the disc again in said first direction, until the inner circumferential edge of the disc reaches ½ the distance difference between the inner circumferential edge of the disc and the outer circumferential surface of the hub, so as to center the disc with respect to the center axis of the hub in both vertical and horizontal directions.

Claim 15 (Previously Presented): A method as claimed in claim 14, further comprising:

monitoring the movement of the first flat member as the first flat member having the flat surface is pressed against the outer circumferential edge of the disc toward the center axis of the hub.

Claim 16 (Previously Presented): A method as claimed in claim 14, wherein the first flat member having the flat surface is pressed against the outer circumferential edge of the disc toward the center axis of the hub, via a spring.